IN THE CLAIMS

Please amend the claims as follows:

1. (Canceled)

2. (Currently Amended) ~~Method according to claim 1, characterized in that~~ A method for producing a copy protected record carrier for digital data, comprising:

determining at least one predetermined repetitive bit pattern which encodes into channel bits having an accumulated digital sum value that exceeds a first predetermined limit and that is below a second predetermined limit;

replacing at least one part of the digital data to be recorded by the at least one predetermined repetitive bit pattern and/or inserting the at least one predetermined repetitive bit pattern into at least one part of the digital data to be recorded; and

transferring the digital data, including the at least one replaced and/or inserted part, onto the record carrier by a mastering process so that the accumulated digital sum value, which exceeds the first predetermined limit and is below the second predetermined limit, is achieved in the at least one replaced and/or inserted part,

wherein said predetermined repetitive bit pattern is selected so that an abnormal writing beam deviation from ~~the~~ an ideal position of a writing beam of a record carrier recording device for recordable record carriers ~~which writing beam deviation~~ is ~~big~~ large enough to ensure that a writing process will be aborted or disturbed.

3. (Canceled)

4. (Currently Amended) ~~Method according to claim 1, characterized in that~~ A method for producing a copy protected record carrier for digital data, comprising:

determining at least one predetermined repetitive bit pattern which encodes into channel bits having an accumulated digital sum value that exceeds a first predetermined limit and that is below a second predetermined limit;

replacing at least one part of the digital data to be recorded by the at least one predetermined repetitive bit pattern and/or inserting the at least one predetermined repetitive bit pattern into at least one part of the digital data to be recorded; and

transferring the digital data, including the at least one replaced and/or inserted part, onto the record carrier by a mastering process so that the accumulated digital sum value, which exceeds the first predetermined limit and is below the second predetermined limit, is achieved in the at least one replaced and/or inserted part,

wherein the predetermined repetitive bit pattern is selected so ~~that~~ as to cause an abnormal writing beam deviation from ~~the~~ an ideal position of a writing beam of a record carrier recording device for recordable record carriers, and is selected so ~~that a~~ as to cause an abnormal reading beam deviation from ~~the~~ an ideal position of a reading beam of a record carrier reading device which reads a copy of the copy protected record carrier recorded on a recordable record carrier, wherein the combined effect of writing beam deviation and reading beam deviation is ~~big~~ large enough to ensure that a reading process will be aborted or disturbed.

5. (Canceled)

6. (Currently Amended) ~~Method according to claim 1, characterized in that~~ A method for producing a copy protected record carrier for digital data, comprising:

determining at least one predetermined repetitive bit pattern which encodes into channel bits having an accumulated digital sum value that exceeds a first predetermined limit and that is below a second predetermined limit;

replacing at least one part of the digital data to be recorded by the at least one predetermined repetitive bit pattern and/or inserting the at least one predetermined repetitive bit pattern into at least one part of the digital data to be recorded; and

transferring the digital data, including the at least one replaced and/or inserted part, onto the record carrier by a mastering process so that the accumulated digital sum value, which exceeds the first predetermined limit and is below the second predetermined limit, is achieved in the at least one replaced and/or inserted part,

wherein said predetermined repetitive bit pattern is selected so that merge bits are predefined and ~~therefore~~ not changeable by ~~the~~ recording ~~electronic~~ electronics of a recorder due to design rules of ~~the~~ a digital data content of the record carrier.

7. (Canceled)

8. (Currently Amended) ~~Method according to claim 1, characterized in that~~ A method for producing a copy protected record carrier for digital data, comprising:

determining at least one predetermined repetitive bit pattern which encodes into channel bits having an accumulated digital sum value that exceeds a first predetermined limit and that is below a second predetermined limit;

replacing at least one part of the digital data to be recorded by the at least one predetermined repetitive bit pattern and/or inserting the at least one predetermined repetitive bit pattern into at least one part of the digital data to be recorded; and

transferring the digital data, including the at least one replaced and/or inserted part, onto the record carrier by a mastering process so that the accumulated digital sum value, which exceeds the first predetermined limit and is below the second predetermined limit, is achieved in the at least one replaced and/or inserted part,

wherein ~~in case of~~ for audio digital data, the predetermined repetitive bit pattern is ~~preferably~~ selected so that a low analog audio DC value is achieved.

9. (Currently Amended) ~~Method according to claim 1, characterized in that in case of~~ A method for producing a copy protected record carrier for digital data, comprising:

determining at least one predetermined repetitive bit pattern which encodes into channel bits having an accumulated digital sum value that exceeds a first predetermined limit and that is below a second predetermined limit;

replacing at least one part of the digital data to be recorded by the at least one predetermined repetitive bit pattern and/or inserting the at least one predetermined repetitive bit pattern into at least one part of the digital data to be recorded; and

transferring the digital data, including the at least one replaced and/or inserted part, onto the record carrier by a mastering process so that the accumulated digital sum value, which exceeds the first predetermined limit and is below the second predetermined limit, is achieved in the at least one replaced and/or inserted part,

wherein for audio digital data, said predetermined repetitive bit pattern is ~~preferably~~ selected so that an equal analog audio DC value in all audio channels is achieved.

10. (Currently Amended) ~~Method according to claim 1, characterized in that in case of~~ A method for producing a copy protected record carrier for digital data, comprising:

determining at least one predetermined repetitive bit pattern which encodes into channel bits having an accumulated digital sum value that exceeds a first predetermined limit and that is below a second predetermined limit;

replacing at least one part of the digital data to be recorded by the at least one predetermined repetitive bit pattern and/or inserting the at least one predetermined repetitive bit pattern into at least one part of the digital data to be recorded; and

transferring the digital data, including the at least one replaced and/or inserted part, onto the record carrier by a mastering process so that the accumulated digital sum value, which exceeds the first predetermined limit and is below the second predetermined limit, is achieved in the at least one replaced and/or inserted part,

wherein for audio digital data, said predetermined repetitive bit pattern is ~~preferably~~ selected so that an audio output signal corresponding to the digital data is achieved, ~~which~~ wherein the analog audio output signal has a frequency and/or amplitude which cannot be heard or can hardly be heard by humans.

11. (Currently Amended) ~~Method according to claim 1, characterized in that in case of~~ A method for producing a copy protected record carrier for digital data, comprising:

determining at least one predetermined repetitive bit pattern which encodes into channel bits having an accumulated digital sum value that exceeds a first predetermined limit and that is below a second predetermined limit;

replacing at least one part of the digital data to be recorded by the at least one predetermined repetitive bit pattern and/or inserting the at least one predetermined repetitive bit pattern into at least one part of the digital data to be recorded; and

transferring the digital data, including the at least one replaced and/or inserted part, onto the record carrier by a mastering process so that the accumulated digital sum value,

which exceeds the first predetermined limit and is below the second predetermined limit, is achieved in the at least one replaced and/or inserted part,

wherein for audio digital data, before and after the predetermined repetitive bit pattern, a ramp signal is added ~~which~~ that ensures a smooth transition from and to the digital data signal content before and after the signal content of the predetermined repetitive bit pattern.

12. (Currently Amended) ~~Computer~~ A computer program product[[,]] comprising computer program means ~~adapted to~~ embedded on a computer-readable medium, the computer program means configured to perform the ~~method~~ steps ~~as defined~~ recited in claim 1 ~~or parts thereof~~ when ~~being~~ executed on a computer[[,]] or a digital signal processor~~, or the like~~.

13. (Currently Amended) ~~Device~~ A device configured to produce a record carrier with copy protection~~, characterized by~~ comprising:

a first unit for replacing at least one part of the digital data to be recorded by at least one predetermined repetitive bit pattern and/or for inserting the at least one predetermined repetitive bit pattern into at least one part of the digital data to be recorded, wherein the repetitive bit pattern encodes into channel bits having an accumulated digital sum value that exceeds a first predetermined limit and that is below a second predetermined limit, and

a second unit for transferring the digital data including the at least one replaced and/or inserted part to a record carrier production unit which produces the record carrier by a mastering process so that the accumulated digital sum value that exceeds a first predetermined limit and is below a second predetermined limit is achieved in the at least one replaced and/or inserted part,

wherein said at least one predetermined repetitive bit pattern is selected so that an abnormal writing beam deviation from an ideal position of a writing beam of a record carrier recording device for recordable record carriers is large enough to ensure that a writing process will be aborted or disturbed.

14. (Currently Amended) ~~Copy~~ A copy protected record carrier, ~~characterized by~~ comprising:

at least one part ~~comprising~~ including at least one predetermined repetitive bit pattern which encodes into channel bits having an accumulated digital sum value that exceeds a first predetermined limit and is below a second predetermined limit,

wherein the at least one predetermined repetitive bit pattern is selected so that an abnormal writing beam deviation from an ideal position of a writing beam of a record carrier recording device for recordable record carriers is large enough to ensure that a writing process will be aborted or disturbed.

15. (Withdrawn) Method to copy digital data stored on a record carrier with copy protection onto a recordable record carrier, characterized by

searching for at least one part of digital data to be copied onto the recordable record carrier comprising at least one predetermined repetitive bit pattern which would encode into channel bits having an accumulated digital sum value that exceeds a first predetermined limit and is below a second predetermined limit, and

replacing the at least one part by a bit pattern which encodes into channel bits having an accumulated digital sum value that is below the first predetermined limit, or for deleting the at least one part.

16. (Withdrawn) Method to copy digital data stored on a record carrier with copy protection onto a recordable record carrier, characterized by

searching for at least one part of digital data to be copied onto the recordable record carrier comprising at least one predetermined repetitive bit pattern which would optimally encode into channel bits having an accumulated digital sum value that exceeds a first predetermined limit and is below a second predetermined limit, and

encoding the at least one part non optimal into channel bits having an accumulated digital sum value that is below the first predetermined limit.

17. (Withdrawn) Computer program product, comprising computer program means adapted to perform the method steps as defined in claim 15 when being executed on a computer, digital signal processor, or the like.

18. (Withdrawn) Computer storage means, comprising a computer program product according to claim 17.

19. (Withdrawn) Device to copy digital data stored on a record carrier with copy protection onto a recordable record carrier, characterized by

a searching unit to search for at least one part of digital data to be copied onto the recordable record carrier comprising at least one predetermined repetitive bit pattern which would encode into channel bits having an accumulated digital sum value that exceeds a first predetermined limit and is below a second predetermined limit, and

a replacement unit for replacing the at least one part by a bit pattern which encodes into channel bits having an accumulated digital sum value that is below the first predetermined limit, or for deleting the at least one part.

20. (Withdrawn) Device to copy digital data stored on a record carrier with copy protection onto a recordable record carrier, characterized by

a searching unit to search for at least one part of digital data to be copied onto the recordable record carrier comprising at least one predetermined repetitive bit pattern which would optimally encode into channel bits having an accumulated digital sum value that exceeds a first predetermined limit and is below a second predetermined limit, and

an encoding unit for encoding the at least one part non optimal into channel bits having an accumulated digital sum value that is below the first predetermined limit.

21. (Withdrawn) Computer program product comprising computer program means adapted to perform the method steps as defined in claim 16 when being executed on a computer, digital signal processor, or the like.

22. (Withdrawn) Computer storage means, comprising a computer program product according to claim 21.

23. (Currently Amended) A method for making a copy protected carrier having at least one part with at least one predetermined repetitive bit pattern that encodes into channel bits having an accumulated digital sum value that exceeds a first predetermined limit and is below a second predetermined limit, the method comprising ~~steps of~~:

determining at least one predetermined repetitive bit pattern which encodes into channel bits having an accumulated digital sum value that exceeds a first predetermined limit and that is below a second predetermined limit[[,]];

replacing at least one part of the digital data to be recorded by the at least one predetermined repetitive bit pattern and/or inserting the at least one predetermined repetitive bit pattern into at least one part of the digital data to be recorded[,]]; and

transferring the digital data, including the at least one replaced and/or inserted part, onto the record carrier by a mastering process so that the accumulated digital sum value, which exceeds the first predetermined limit and is below the second predetermined limit, is achieved in the at least one replaced and/or inserted part,

wherein the predetermined at least one repetitive bit pattern is selected so that an abnormal writing beam deviation from an ideal position of a writing beam of a record carrier recording device for recordable record carriers is large enough to ensure that a writing process will be aborted or disturbed.